

Work Order ID 109453

November-21-13 2:28:10 PM

109453

Page 1

Item ID: D3943-5

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Plate

Start Date: 11/27/13 Start Qty: 4.00

4

Cust Item ID:

Required Date: 12/02/13 Req'd Qty: 4.00

4

Customer:

Reference:

Run Start ***NR1***

Approvals: Process Plan: MLJ Date: 13-11-25 Tooling: _____ Date: _____

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3943 | E |

100

0.00

100

Waterjet

FLOW CNC Waterjet

Memo

0.00

1-Cut as per Dwg D3943

Dwg Rev: 2

Prog Rev: 12

2-Deburr if necessary

4 0 Jm14-04-9

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

4 0 Jm14-04-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
|--|------|------|-----|--|-------------------|---|-------------|--------------|--------------|--|--|
| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Design <input type="checkbox"/> | | | | | | | | | | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Handling/Pre <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Offset/Setup <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Transport <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |

| FAULT CATEGORY | | | | | | | |
|--|--|--|--|---|--|--|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | |

Work Order ID 109453

109453

Page 2

November-21-13 2:28:10 PM

Item ID: D3943-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Plate

Start Date: 11/27/13 Start Qty: 4.00 *4*

Cust Item ID:

Required Date: 12/02/13 Req'd Qty: 4.00 *4*

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: Date: Tooling: Date:

Stop *NR2*

QC: Date: SPC (Y/N): Date:

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 | QC8- Inspect parts - second check | 0.00 | | | | | | | |
| *120* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 130 | Manufacture as per dwg | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| Mill Conv | Memo | 0.00 | | | | | | | |
| Conventional Milling Machine | 1-OPEN TO TAP DRILL SIZE FOR 5/8" THREAD | | | | | | | | |
| | 2-DRILL TAP 1/4"-28 AS PER DWG | | | | | | | | |
| | 3-MILL RAD | | | | | | | | |
| 140 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

F32 14/04/27

4

Ø

DAS
27
9-89

14/4/29

DAS
44
9-89

14/04/27

14/04/27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design <input type="checkbox"/> | | | | | | | | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Handling/Pre <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Offset/Setup <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Transport <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| | | |
|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence |
| | | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 109453

109453

Page 3

November-21-13 2:28:10 PM

Item ID: D3943-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Plate

Start Date: 11/27/13 Start Qty: 4.00 *4*

Cust Item ID:

Required Date: 12/02/13 Req'd Qty: 4.00 *4*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-------------------|
| 150 | Identify as per dwg & Stock Location | 0.00 | | | | | | | |
| *150* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | 4x | | 14-4-28 | DAS 28 9-88 |
| Packaging | | | | | | | | | |
| 160 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *160* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | 14/4/30 J |
| Quality Control | | | | | | | | | |

14-4-28

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
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| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design <input type="checkbox"/> | | | | | | | | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Handling/Pre <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Offset/Setup <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Transport <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ |
|--|--|---|---|

Picklist Print

November-21-13 2:28:09 PM

Page 1

Work Order ID: 109453

Parent Item: D3943-5

Parent Item Name: Plate

Start Date: 11/27/13

Required Date: 12/02/13

Start Qty: 4.00

Required Qty: 4.00

Comments: Est Rev:A New Issue 09-06-03 JLM Verified By:EC IPP Rev:B as per dwg REV.C DD
10.02.22 verified by:EC IPP REV:C 11.08.16 AS PER REV.E DD VERF:JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M1010B0.375X03.500 | | Purchased | No | | | 100 | f | 9.0000 | 0.13 | 0.5473684 | | | |

1010-1025 Steel Bar .375 x 3.500

Location

Loc Qty

Loc Code

MAT

9

m126610

9

126610 →

Jm14-04-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
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| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
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| Design | | | | | | | | | |
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| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ |
|--|--|---|---|

| ITEM No. | QTY -041 | QTY -051 | QTY -053 | PART NUMBER | DESCRIPTION | PREFERED SUPPLIER |
|----------|----------|----------|----------|-------------|--|---------------------------------------|
| 1 | X | | | D3943-041 | GROUND HANDLING CRANK ASSEMBLY | |
| 5 | 1 | X | | D3943-051 | HANDLE ASSEMBLY | |
| 6 | 1 | | X | D3943-053 | CHAIN ASSEMBLY | |
| 11 | | 1 | | D3943-1 | HANDLE | M/F HANDLE FROM DIS-ASSEMBLED ITEM 39 |
| 12 | 1 | | | D3943-3 | HANDLE EXTENSION | |
| 13 | | 1 | | D3943-5 | PLATE | |
| 14 | | 2 | | D3943-7 | STUD | |
| 15 | | | 1 | D3943-9 | CHAIN | USE CHAIN SUPPLIED WITH ITEM 39 |
| 16 | | | 1 | D4405-1 | EYE AND FORK SWIVEL | |
| 21 | 1 | | | D2690-4 | LANYARD | |
| 22 | 1 | | | D3585-1 | SET SCREW | |
| 23 | 1 | | | D3949-041 | REMOVE BEFORE FLIGHT FLAG | |
| 24 | | | 1 | D3954-5 | CHAIN LUG | |
| 25 | 1 | | | D3954-7 | RATCHET LUG | |
| 26 | | | 1 | D3954-9 | GWT CHAIN PIN | |
| 31 | 1 | | | AN5-11A | BOLT | |
| 32 | 1 | | | AN960-516 | WASHER | |
| 33 | 1 | | | MS21042L5 | NUT | |
| 39 | 1 | | | 8143919 | LEVER CHAIN HOIST (POWER FIST) | PRINCESS AUTO / 4000 lbs CAPACITY |
| 51 | 1 | | | S-1475 | SPRING | REID SUPPLY |
| 52 | 1 | | | 3408A59 | BALL PLUNGER | McMASTER CARR |
| 53 | 1 | | | HX-15 | SOCKET HEAD CAP SCREW 1/2-20 UNC X 0.75 LG | HASKINS |
| 54 | 1 | | | HX-16 | SOCKET HEAD CAP SCREW 1/2-20 UNC X 1.0 LG | HASKINS |

109453 MJS
13-11-25

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MJS

| | | | |
|------------|---|---|----------|
| E | CHANGED D3945-3 MATL TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5) PER PAR11-113. | MB | 11.07.27 |
| D | SHT 1 PL. ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED. SHT 3 ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495) | AJS | 11.05.16 |
| C | RMV FINISH -041 (ZN A8-2). ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5). ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001 | CP | 10.01.26 |
| B | SHT 1 PL. ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES; FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT. | AJS | 09.10.15 |
| A | NEW ISSUE | AJS | 09.05.13 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | DSTON / AJS | <div>DART AEROSPACE LTD</div> <div>HAWKESBURY, ONTARIO, CANADA</div> <div>DRAWING NO. D3943</div> <div>TITLE GROSS WEIGHT TOW CRANK ASSY</div> <div>SCALE NTS</div> <div>DATE 11.07.27</div> <div><small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small></div> | |
| DRAWN | | | |
| CHECKED | ASS | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | N/A | | |
| DATE | 11.07.27 | | |

REMOVE AND RETAIN
RUBBER HAND GRIP

DISCARD PIN

RETAIN PIN

REMOVE &
DISCARD HOOK

REMOVE & DISCARD HOOK

8143919 LEVER CHAIN HOIST
(SHOWN PRIOR TO MODIFICATION)
(CHAIN SHOWN SHORTENED FOR CLARITY)

8143919
LEVER CHAIN HOIST

(CHAIN NOT SHOWN FOR CLARITY)

AN5-11A BOLT
AN980-516 WASHER
MS21042L5 NUT

3408A59
BALL PLUNGER

RE-INSTALL
RUBBER HAND-GRIP
HERE

D3943-3
HANDLE EXTENSION

D2690-4 LANYARD

△ D3949-041 FLAG

HX-16 S/H CAP SCREW

HX-15 S/H CAP SCREW
S-1475 SPRING

CALIBRATION TAG

D3585-1 SET SCREW

RE-INSTALL PIN

D3943-053 CHAIN ASSY

(CHAIN SHOWN SHORTENED FOR CLARITY)

D3943-041 GROUND HANDLING CRANK ASSEMBLY

NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER
- 7) CALIBRATION TAG PER DART QSI 008 4.4 (ZN C1-2)

| | | | |
|------------|-------------|--|--------------|
| DESIGN | DSTOW / AJS | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | ASS | DRAWING NO. | REV. E |
| MFG. APPR. | | D3943 | SHEET 2 OF 5 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | N/A | GROSS WEIGHT TOW CRANK ASSY | NTS |
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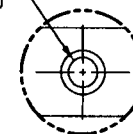
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2011-07-29

D3943-1 HANDLE

2 PL

9.75

2.00

Ø0.31
THRUD3943-7 STUD
2 PLTHREAD $\frac{1}{4}$ -20 UNC-2B
THRUVIEW A-A AS-3
(SCALE 2X) BS-39.38
REF

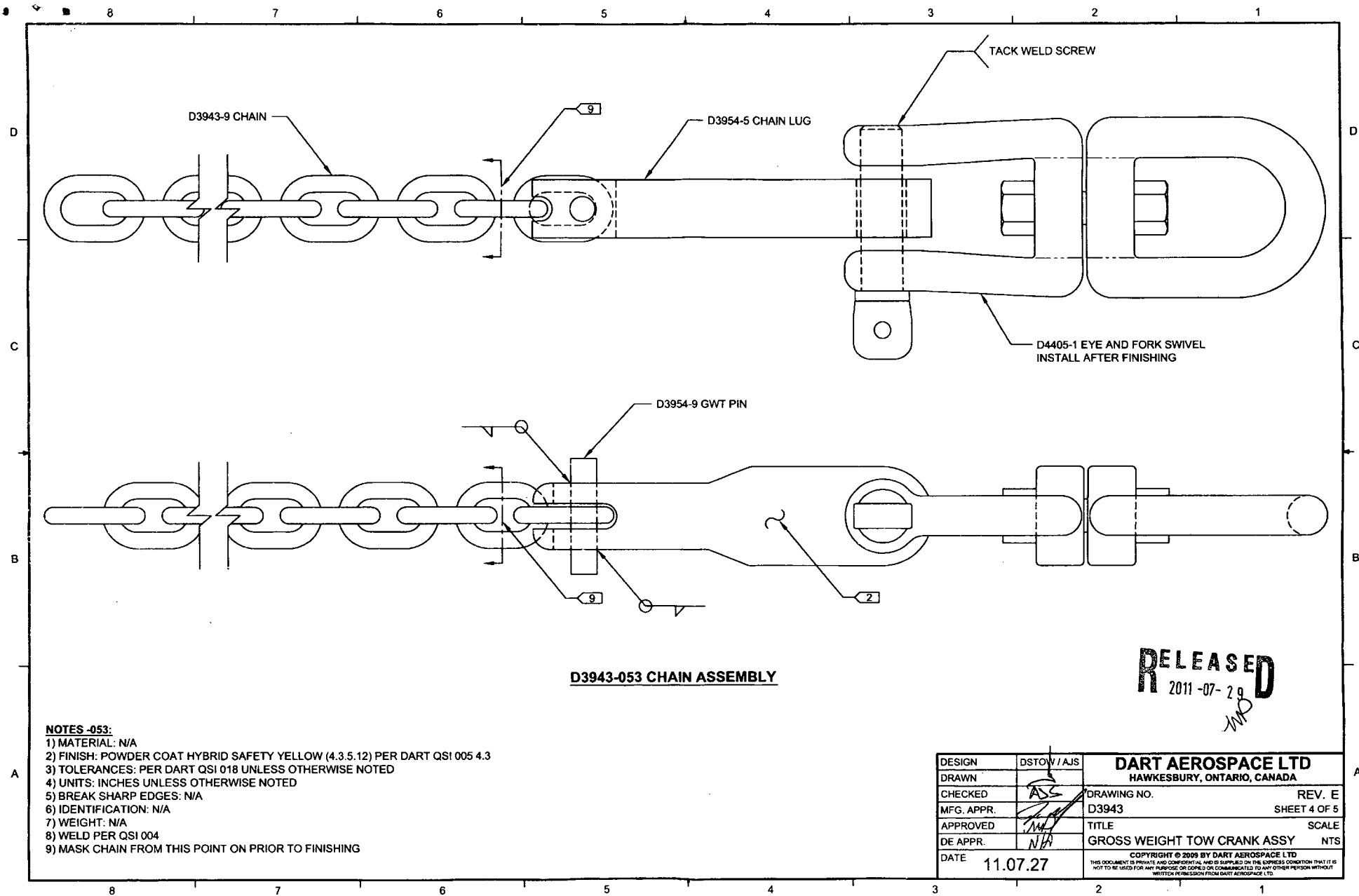
D3943-5 PLATE

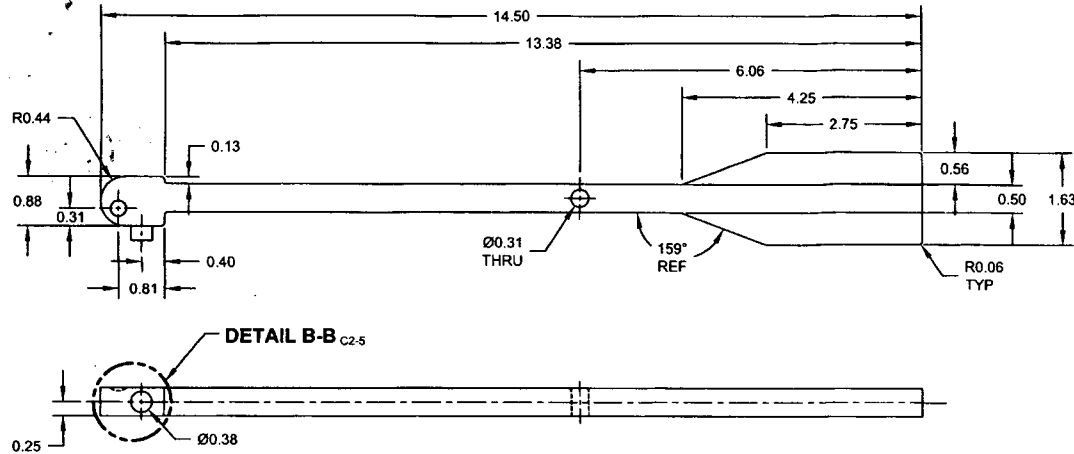
D3943-051 HANDLE ASSEMBLY**NOTES -051:**

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

| | | | |
|------------|-------------|--|--------------|
| DESIGN | DSTOW / AJS | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | ASS | DRAWING NO. | REV. E |
| MFG. APPR. | | D3943 | SHEET 3 OF 5 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | N/A | GROSS WEIGHT TOW CRANK ASSY | NTS |
| DATE | 11.07.27 | <small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

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D3943-3 HANDLE EXTENSION

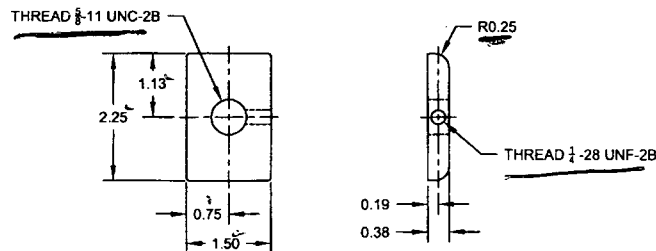
NOTES:

1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S
OR:
AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S

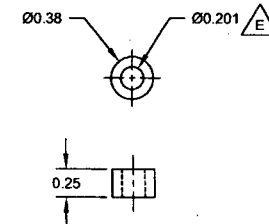
-5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S
OR:
MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

-7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

2) FINISH: NONE $\triangle E$
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

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2011-07-28

| | | | |
|------------|-------------|-----------------------------|--------------|
| DESIGN | DSTOW / AJS | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | ASS | DRAWING NO. D3943 | REV. E |
| MFG. APPR. | | TITLE | SHEET 5 OF 5 |
| APPROVED | | GROSS WEIGHT TOW CRANK ASSY | NTS |
| DE APPR. | N/A | | |
| DATE | 11.07.27 | | |

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